

2002 Field Evaluation Progress Report Idaho Nonpoint Source Program

Summary

During summer and fall 2002 staff from the Department of Environmental Quality (DEQ) State Office of Technical Services staff evaluated 27 of 50 on-going nonpoint source (NPS) contracted projects. In order to properly conduct field evaluations, staff used DEQ's list of NPS field project requirements to generate an evaluation form to be used for all field evaluations. Field evaluators recorded a variety of best management practices (BMPs) related to the seven recognized NPS categories of logging, agriculture, historic mining, hydrologic habitat modification, ground water, transportation, and urban storm water runoff.

Three project areas -- the Succor Creek/Homedale School District Water Quality Project, the Jim Ford Creek Watershed Enhancement Project, and the Paradise Creek Total Maximum Daily Load (TMDL) Implementation Project -- are highlighted from the field this year because they exemplify outstanding coordination, design and implementation. Pictures of the three highlighted projects appear in this report. Evaluation reports including photographs of all 27 contracted projects are contained as an appendix in the back of this report or can be accessed electronically by link through Table 1 of this report.

Introduction

DEQ currently oversees approximately 50 NPS regional projects in Idaho. To assist in tracking, each project is assigned a contract number. If projects extend to several years and additional tasks and funding is granted, more than one contract number may be assigned to a project area (see Table 1). To assure that the projects are completed in a timely manner and achieve their overarching goal of cleaning up and preventing NPS water pollution, all projects are subject to field evaluation by DEQ staff. DEQ staff set a goal to field evaluate the progress of half of the current projects annually. Therefore, over a two-year cycle all of the on-going projects will receive a field evaluation. During the summer and fall of 2002 staff from the DEQ State Office of Technical Services exceeded that goal by evaluating 27 of 50 on-going NPS contracted projects.

History of the Nonpoint Source Program

Congress established the national NPS program in 1987 when it amended the Clean Water Act with section 319, "Nonpoint Source Management Programs." States were given the federally funded mandate to address NPS water pollution by 1) conducting statewide assessments of their waters, 2) developing NPS management programs to address those identified impaired or threatened waters, and 3) implementing EPA-approved, federally funded NPS management programs to clean up and prevent NPS pollution.

Initially, grants were awarded on a competitive basis to any state that wished to apply. In 1995 EPA recognized that all states had developed maturity in effectively working to clean up and prevent NPS pollution and invited all 50 states to apply for grants on a non-competitive basis. This new approach allowed federal funds to be more widely distributed among the states while still requiring that all projects meet certain strict standards. At that point the EPA and the states formed the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) which led to the current NPS framework. In Idaho NPS funding has resulted in over 100 contracts for on-ground projects designed to clean up and prevent NPS pollution. Of the 100 projects undertaken since the inception of the NPS program, Idaho currently oversees approximately 50 on-going projects that are described in detail through formal contracts established between DEQ and a variety of federal and state agencies, and nonprofit organizations.

Creation of the Field Evaluation Process

Before beginning the field evaluations DEQ staff determined that since many projects had tasks that require more than one year to complete, it may be necessary to divide the evaluations into three categories based on how close each project is to completion. DEQ's initial plan was to conduct *field reviews* on projects in their early stage of fieldwork. Projects further along should receive a more detailed *field inspection* and projects that are nearly complete or complete should receive the most detailed evaluation – a *field audit*.

DEQ used its list of NPS field project requirements to generate a detailed evaluation form for staff to use for field evaluations. Once DEQ staff began the evaluation process it became apparent that there was very little distinction between the detail of data gathered for projects in their early stages and those in their late stages. Therefore, it was decided to perform the same level of evaluation on all projects. For all projects the DEQ evaluator visiting the site carefully reviewed the project's subgrant agreement and made notes prior to going to the field. The evaluator routinely contacted the project manager to make arrangements to accompany the project manager, DEQ regional staff, and any other stakeholders to the field. In all cases the evaluation form was used as a guide to assure that all NPS requirements were being met in the field.

Results of the 2002 Field Evaluation

DEQ evaluators traveled to 21 geographical areas of Idaho and evaluated 27 contracted projects during the summer and fall of 2002. With the exception of two contracted projects covering Coeur d' Alene Tribal lands, and three contracted projects covering the historic Rex mill site near Coeur d' Alene, all of the other contracted projects demonstrated substantial progress toward completion of their designated tasks to reduce, eliminate or prevent NPS water pollution.

Although some of the work on the two Coeur d' Alene Tribal lands projects has been completed, most of the work has been repeatedly delayed due to two Tribal management changes, proposed project adjustments and bad weather. The U. S. Bureau of Land Management repeatedly delayed three mining related projects scheduled at Rex Mill resulting in the withdrawal of NPS funding by DEQ. However, important reclamation work at this historic gold and silver mill will be achieved through other private and state funding sources.

Fieldwork evaluated by DEQ staff on NPS projects included a variety of common BMPs related to the seven recognized NPS categories of logging, agriculture, historic mining, hydrologic habitat modification, ground water, transportation, and urban storm water runoff. Evaluators examined work on BMPs related to roadways that overlap into all seven categories. These BMPs included eradication of unneeded roadways, application of gravel to roadbeds, creation of logging truck friendly rolling water bars, and installation of fish friendly culverts. Other overlapping road-related BMPs observed included installation of properly sloped roadbeds, planting of drought resistant vegetation along road cuts and fills, and installation of check dams along borrow ditches.

Some agriculture-related BMPs evaluated required education and close cooperation among farmers, ranchers, and numerous federal, state, and nonprofit organizations for implementation. These BMPs included installing vegetative buffer strips between crops and water ways, implementing no-till farming techniques, installing an array of storm water runoff retention facilities, and planting suitable native vegetation in intermittent waterways that were formerly cultivated for crops. Evaluators also observed strategic placement of fencing to keep livestock out of streambeds, stream bank restoration, and relocating confined animal feeding operations (CAFOs) away from waterways.

In the historic mining category evaluators observed BMPs designed to reduce or eliminate acid rock drainage (ARD). In order for ARD (sulfuric acid) to form, three components (air, water and sulfidic mine waste rock) must all be combined. BMPs observed in the field were designed to separate storm water and surface water from waste rock. The most common method to achieve separation involved capping and sloping mine waste rock to eliminate infiltration of surface water.

In the urban storm water runoff category evaluators toured stream channel restoration projects along Paradise Creek within the City of Moscow. Where previously in the mid 1900s the stream channel had been straightened, deepened, and lined with rip rap to allow for development, a large and diverse group of stakeholders led by the Palouse-Clearwater Environmental Institute conducted a superb effort to recreate a meandering channel and flood plain. Other urban-related BMPs observed in Moscow and in Pocatello included creation of wetlands and an innovative use of paleo-oxbow geomorphology to allow infiltration and cleaning of storm water prior to discharge to streams.

Table 1 lists details of all 27 of the NPS contracted projects that were field evaluated during the summer and fall of 2002. These 27 different projects (contracts) occurred at 21 sites around

Idaho. Following Table 1, three project areas -- The Succor Creek/Homedale School District Water Quality Project, the Jim Ford Creek Watershed Enhancement Project and the Paradise Creek TMDL Implementation Project are highlighted because they exemplify outstanding coordination, design, and implementation. Evaluation reports of all 27 projects are contained as an appendix in the back of this report or can be accessed electronically through links in Table 1.

Table 1. ACTIVE NONPOINT SOURCE PROJECTS THAT WERE FIELD EVALUATED DURING SUMMER/FALL 2002

Grant Year	Contract Number*	Project Name	Hydrologic Unit Number	Tasks or BMPs Evaluated	Evaluator	DEQ Region
1999	Q525	Cascade Reservoir, Watershed and Roads	17050123	Sediment control BMPs for dirt roads	J.West	Boise
1998	Q444	Sheridan Creek Restoration	17040202	Stream bank stabilization, fencing, grazing plans, weed control	D. Reaney	Idaho Falls
1998, 1999	Q529 and Q366	Coeur d' Alene Tribe Wetland Creation and Restoration/Lake Creek – Plummer	1701030423	Sediment control BMPs for dirt roads	J.West	Coeur d' Alene
1999	Q558	Cascade Reservoir Watershed Roads and Forested Lands	17050123	Sediment control BMPs for dirt roads	J.West	Boise
1999, 2000	Q605 and Q562	Paradise Creek TMDL Implementation #1and #2	17060108	Sediment control BMPs for dirt roads, grazing plans, relocation of CAFOs, fencing, crop management, stream channel rehab, wetlands	J.West	Lewiston
1999, 2000	Q564 and S009	Scriver Creek Watershed Roads and Forested Lands	17050112	Sediment control BMPs for dirt roads	J.West	Boise
2000	Q608	Ashton Groundwater Protection	17040203	Nutrient management of crops	D. Reaney	Idaho Falls
2000	Q609	Bear River Fencing and Riparian Enhancement	16010202	Stream bank stabilization, fencing, grazing plans, weed control	D. Reaney	Pocatello
2000, 2001	S011 and Q610	Winchester Lake Watershed NPS Implementation and Upper Lapwai Creek Watershed	17060306	Sediment control BMPs for dirt roads	J.West	Lewiston
2000	S008	Twentyfour Mile Creek TMDL Implementation	17040208	Stream bank stabilization, fencing, grazing plans, weed control	D. Reaney	Pocatello
1998, 1999, 2000	Q557, Q336, and S012	Completion of Designed Water Management at Rex Mill Site, E. Fork Ninemile Creek	17010302	ARD Control, Project terminated by 319 and refunded through other sources	J.West	Coeur d' Alene
2001	S014	Trestle Creek Watershed Conservation	17010214	Sediment control BMPs for dirt roads, conservation easements	J.West	Coeur d' Alene
2001	S015	Jim Ford Creek Watershed Enhancement	17060306	Sediment control BMPs for dirt roads, grazing plans, relocation of CAFOs, fencing, crop management	J.West	Lewiston
2001	S016	Thomas Fork Stream Bank Protection	16010102	Sediment control BMPs for dirt roads	J.West	Pocatello

Grant Year	Contract Number*	Project Name	Hydrologic Unit Number	Tasks or BMPs Evaluated	Evaluator	DEQ Region
2001	S017	Phase 1 South Fork of Cottonwood Creek TMDL Implementation	17060305	Sediment control BMPs for dirt roads, grazing plans, relocation of AFOs, fencing, crop management	J.West	Lewiston
2001	S018	Porter Riparian Restoration Cub River	16010202	Stream bank stabilization, fencing, grazing plans	M. Shumar	Pocatello
2001	S019	Succor Creek / Homedale School District – Water Quality	17050103	Stream bank stabilization, agricultural irrigation water cleanup, fencing	D Abderhalden	Boise
2001	S022	North City Park Wetland	17040208	Storm water infiltration BMPs		Pocatello
2001	S024	Santa Creek Streambank Protection and Stability	17010304	Stream bank stabilization BMPs	J.West	Coeur d' Alene
2001	S025	Success Mill Site	17010302	ARD control, metal ion extraction from ground water	J.West	Coeur d' Alene
2001	S026	Rock Creek Rehabilitation	17040212	Variety of storm water infiltration BMPs	B. Clark	Twin Falls

* More than one contract number for a project indicates that additional funding was later granted for additional tasks.